

30 60  
ATG ATG TCC TCT GCT CAG TTC CTT GGT CTC TTG CTC TGT TTT CAA GGT ACC AGA TGT  
M S S A Q F L G L L L L C F Q G T R C

90 120  
GAT ATC CAG ATG ACA CAG ACT ACA TCC TCC CTG TCT GCC TCT CTG GGA GAC AGA GTC ACC  
D I Q M T Q T T S S L S A S L G D R V T

150 180  
ATC AGT TGC AGG GCC AGT CAG GAC ATT AGC AAT TAT TTA AAC TGG TAT CAG CAG AAA CCA  
I S C R A S O D I S N Y L N W Y Q Q K P

210 240  
GAT GGA ACT GTT AAA CTC CTG ATC TAC TAC ACA TCA AGA TTA CAC TCA GGA GTC CCA TCA  
D G T V K L L I Y Y T S R L H S G V P S

270 300  
AGG TTC AGT GGC AGT GGG TCT GGG ACA AAT TAT TCT CTC ACC ATT AGC AAC CTG GAA CAA  
R F S G S G T N Y S L T I S N L E Q

330 360  
GGA GAT ATT GCC ACT TAC TTT TGC CAA CAG GGT AGT ACG CTT CCG TGG ACG TTC GGT GGA  
G D I A T Y F C O O G S T L P W T F G G

GGC ACC AAG CTG GAA ATC AAA  
G T K L E I K

F I G . I

30 60  
ATG GAT TGG GTG TGG ACC TTG CTA TTC CTG ATA GCA GCT GCC CAA AGT GCC CAA GCA CAG  
M D W V W T L L F L I A A A Q S A Q A Q

90 120  
ATC CAG TTG GTG CAG TCT GGA CCT GAG CTG AAG AAG CCT GGA GAG ACA GTC AAG ATC TCC  
I Q L V Q S G P E L K K P G E T V K I S

150 180  
TGC AAG GCT TCT GGG TAT ACC TTC ACA GAA TAT CCA ATG CAC TGG GTG AAG CAG GCT CCA  
C K A S G Y T F T E Y P M H W V K Q A P

210 240  
GGA AAG GGT TTC AAG TGG ATG GGC ATG ATA TAC ACC GAC ACT GGA GAG CCA TCA TAT GCT  
G K G F K W M G M I Y T D T G E P S Y A

270 300  
GAA GAG TTC AAG GGG CGG TTT GCC TTC TCT TTG GAG ACC TCT GCC AGC ACT GCC TAT TTG  
E E F K G R F A F S L E T S A S T A Y L

330 360  
CAG ATC AAC TTC CTC AAA AAT GAG GAC ACG GCT ACA TAT TTC TGT GTA AGA TTT TAC TGG  
Q I N F L K N E D T A T Y F C V R F Y W

390  
GAT TAC TTT GAC TAC TGG GGC CAA GGC ACC ACT CTC ACA GTC TCC TCA  
D Y F D Y W G Q G T T L T V S S

30

ATG GAG ACC GAT ACC CTC CTG CTA TGG GTC CTC CTG CTA TGG GTC CCA GGA TCA ACC GGA  
M E T D T L L L W V L L L W V P G S T G

90

GAT ATT CAG ATG ACC CAG AGT CCG TCG ACC CTC TCT GCT AGC GTC GGG GAT AGG GTC ACC  
D I Q M T Q S P S T L S A S V G D R V T

150

ATA ACT TGC AGG GCA AGT CAG GAC ATT TCG AAT TAT TTA AAC TGG TAT CAG CAG AAG CCA  
I T C R A S O D I S N Y L N W Y Q Q K P

210

GGC AAA GCT CCC AAG CTT CTA ATT TAT TAC ACA TCA AGA TTA CAC TCA GGG GTA CCT TCA  
G K A P K L L I Y Y T S R L H S G V P S

270

CGC TTC AGT GGC AGT GGA TCT GGG ACC AAT TAT ACC CTC ACA ATC TCG AGT CTG CAG CCA  
R F S G S G T N Y T L T I S S L Q P

330

GAT GAT TTC GCC ACT TAT TTT TGC CAA CAG GGT AGT ACG CTT CCG TGG ACG TTC GGT CAG  
D D F A T Y F C O O G S T L P W T F G Q

GGG ACC AAG GTG GAG GTC AAA  
G T K V E V K

30  
 ATG GAT TGG GTG TGG ACC TTG CTA TTC CTG ATA GCT GCA GCC CAA AGT GCC CAA GCA CAG  
 M D W V W T L L F L I A A A Q S A Q A Q

60  
 GTC CAG TTG GTG CAG TCT GGA GCT GAG GTG AAG CCT GGA AGC TCA GTC AAG GTG TCC  
 V Q L V Q S G A E V K K P G S S V K V S

90  
 120  
 TGC AAA GCT TCT GGG TAT ACC TTC ACA GAA TAT CCA ATG CAC TGG GTG AGA CAG GCT CCA  
 C K A S G Y T F T E Y P M H W V R Q A P

150  
 180  
 GGA CAG GGT TTC AAG TGG ATG GGC ATG ATA TAC ACC GAC ACT GGA GAG CCA TCA TAT GCT  
 G Q G F K W M G M I Y T D T G E P S Y A

210  
 240  
 GAA GAG TTC AAG GGA CGG TTT ACA TTC ACT TTG GAC ACC TCT ACC AAC ACT GCC TAT ATG  
 E E F K G R F T F T L D T S T N T A Y M

270  
 300  
 GAG CTC AGC TCT CTC AGG TCT GAG GAC ACG GCT GTC TAT TAC TGT GTA AGA TTT TAC TGG  
 E L S S L R S E D T A V Y Y C V R F Y W

330  
 360  
 GAT TAC TTT GAC TAC TGG GGT CAA GGT ACC CTG GTC ACA GTC TCC TCA  
 D Y F D Y W G Q G T L V T V S S

F I Q . 4

# FIG. 5

ttttcttccatttcaggtgtcgtgaggaattcacc  
50

ATG	CTG	GGC	ATC	TGG	ACC	CTC	CTA	CCT	CTG
Met	Leu	Gly	Ile	Trp	Thr	Leu	Leu	Pro	Leu

-10

hFas antigen signal peptide

GTT	CTG	ACT	AGT	GTC	GCT	ACT	CAG	AAC	TTG
Val	Leu	Thr	Ser	Val	Ala	Thr	Gln	Asn	Leu

-1

1

100

→ hFas (nd29)

GAA GGC CTG CAT CAT GAT GGC CAA TTC TGC  
Glu Gly Leu His His Asp Gly Gln Phe Cys

150

CAT AAG CCC TGT CCT CCA GGT GAA AGG AAA  
His Lys Pro Cys Pro Pro Gly Glu Arg Lys

GCT AGG GAC TGC ACA GTC AAT GGG GAT GAA  
Ala Arg Asp Cys Thr Val Asn Gly Asp Glu

200

CCA GAC TGC GTG CCC TGC CAA GAA GGG AAG  
Pro Asp Cys Val Pro Cys Gln Glu Gly Lys

GAG TAC ACA GAC AAA GCC CAT TTT TCT TCC  
Glu Tyr Thr Asp Lys Ala His Phe Ser Ser

50

250

AAA TGC AGA AGA TGT AGA TTG TGT GAT GAA  
Lys Cys Arg Arg Cys Arg Leu Cys Asp Glu

# FIG. 6

300  
GGA CAT GGC TTA GAA GTG GAA ATA AAC TGC  
Gly His Gly Leu Glu Val Glu Ile Asn Cys  
\*

ACC CGG ACC CAG AAT ACC AAG TGC AGA TGT  
Thr Arg Thr Gln Asn Thr Lys Cys Arg Cys

350  
AAA CCA AAC TTT TTT TGT AAC TCT ACT GTA  
Lys Pro Asn Phe Phe Cys Asn Ser Thr Val  
\*

TGT GAA CAC TGT GAC CCT TGC ACC AAA TGT  
Cys Glu His Cys Asp Pro Cys Thr Lys Cys  
100

400  
GAA CAT GGA ATC ATC AAG GAA TGC ACA CTC  
Glu His Gly Ile Ile Lys Glu Cys Thr Leu

450  
ACC AGC AAC ACC AAG TGC AAA GAG GAA GGA  
Thr Ser Asn Thr Lys Cys Lys Glu Glu Gly

TCC AGA TCT AAC GAG CCC AAA TCT TGT GAC  
Ser Arg Ser Asn Glu Pro Lys Ser Cys Asp

→ hIgG1 Fc  
500

AAA ACT CAC ACA TGC CCA CCG TGC CCA GCA  
Lys Thr His Thr Cys Pro Pro Cys Pro Ala

# F I G . 7

CCT GAA CTC CTG GGG GGA CCG TCA GTC TTC  
Pro Glu Leu Leu Gly Gly Pro Ser Val Phe  
150

550

CTC TTC CCC CCA AAA CCC AAG GAC ACC CTC  
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu

600

ATG ATC TCC CGG ACC CCT GAG GTC ACA TGC  
Met Ile Ser Arg Thr Pro Glu Val Thr Cys

GTG GTG GTG GAC GTG AGC CAC GAA GAC CCT  
Val Val Val Asp Val Ser His Glu Asp Pro

650

GAG GTC AAG TTC AAC TGG TAC GTG GAC GGC  
Glu Val Lys Phe Asn Trp Tyr Val Asp Gly

GTG GAG GTG CAT AAT GCC AAG ACA AAG CCG  
Val Glu Val His Asn Ala Lys Thr Lys Pro  
200

700

CGG GAG GAG CAG TAC AAC AGC ACG TAC CGT  
Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg

\*

750

GTG GTC AGC GTC CTC ACC GTC CTG CAC CAG  
Val Val Ser Val Leu Thr Val Leu His Gln

# FIG. 8

GAC TGG CTG AAT GGC AAG GAG TAC AAG TGC  
Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys

800

AAG GTC TCC AAC AAA GCC CTC CCA GCC CCC  
Lys Val Ser Asn Lys Ala Leu Pro Ala Pro

ATC GAG AAA ACC ATC TCC AAA GCC AAA GGG  
Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly

250

850

CAG CCC CGA GAA CCA CAG GTG TAC ACC CTG  
Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu

900

CCC CCA TCC CGG GAT GAG CTG ACC AAG AAC  
Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn

CAG GTC AGC CTG ACC TGC CTG GTC AAA GGC  
Gln Val Ser Leu Thr Cys Leu Val Lys Gly

950

TTC TAT CCC AGC GAC ATC GCC GTG GAG TGG  
Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp

GAG AGC AAT GGG CAG CCG GAG AAC AAC TAC  
Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr

300



# FIG. 9

1000

AAG ACC ACG CCT CCC GTG CTG GAC TCC GAC  
Lys Thr Thr Pro Pro Val Leu Asp Ser Asp

1050

GGC TCC TTC TTC CTC TAC AGC AAG CTC ACC  
Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr

GTG GAC AAG AGC AGG TGG CAG CAG GGG AAC  
Val Asp Lys Ser Arg Trp Gln Gln Gly Asn

1100

GTC TTC TCA TGC TCC GTG ATG CAT GAG GCT  
Val Phe Ser Cys Ser Val Met His Glu Ala

CTG CAC AAC CAC TAC ACG CAG AAG AGC CTC  
Leu His Asn His Tyr Thr Gln Lys Ser Leu

350

1150

TCC CTG TCT CCG GGT AAA TGA TAG ggtacc  
Ser Leu Ser Pro Gly Lys \*\*\* \*\*

ttctgag

# FIG. 10

ttttcttccatttcaggtgtcgtgaggaattcacc

50

ATG	CTG	GGC	ATC	TGG	ACC	CTC	CTA	CCT	CTG
Met	Leu	Gly	Ile	Trp	Thr	Leu	Leu	Pro	Leu

-10

hFas antigen signal peptide

GTT	CTG	ACT	AGT	GTC	GCT	ACT	CAG	AAC	TTG
Val	Leu	Thr	Ser	Val	Ala	Thr	Gln	Asn	Leu

-1

1

hFas (nd29)

100

GAA	GGC	CTG	CAT	CAT	GAT	GGC	CAA	TTC	TGC
Glu	Gly	Leu	His	His	Asp	Gly	Gln	Phe	Cys

150

CAT	AAG	CCC	TGT	CCT	CCA	GGT	GAA	AGG	AAA
His	Lys	Pro	Cys	Pro	Pro	Gly	Glu	Arg	Lys

GCT	AGG	GAC	TGC	ACA	GTC	AAT	GGG	GAT	GAA
Ala	Arg	Asp	Cys	Thr	Val	Asn	Gly	Asp	Glu

200

CCA	GAC	TGC	GTG	CCC	TGC	CAA	GAA	GGG	AAG
Pro	Asp	Cys	Val	Pro	Cys	Gln	Glu	Gly	Lys

GAG	TAC	ACA	GAC	AAA	GCC	CAT	TTT	TCT	TCC
Glu	Tyr	Thr	Asp	Lys	Ala	His	Phe	Ser	Ser

50

250

AAA	TGC	AGA	AGA	TGT	AGA	TTG	TGT	GAT	GAA
Lys	Cys	Arg	Arg	Cys	Arg	Leu	Cys	Asp	Glu

F I G . 1 1

300

GGA CAT GGC TTA GAA GTG GAA ATA AAC TGC  
Gly His Gly Leu Glu Val Glu Ile Asn Cys  
\*

ACC CGG ACC CAG AAT ACC AAG TGC AGA TGT  
Thr Arg Thr Gln Asn Thr Lys Cys Arg Cys

350

AAA CCA AAC TTT TTT TGT AAC TCT ACT GTA  
Lys Pro Asn Phe Phe Cys Asn Ser Thr Val  
\*

TGT GAA CAC TGT GAC CCT TGC ACC AAA TGT  
Cys Glu His Cys Asp Pro Cys Thr Lys Cys  
100

400

GAA CAT GGA ATC ATC AAG GAA TGC ACA CTC  
Glu His Gly Ile Ile Lys Glu Cys Thr Leu

450

ACC AGC AAC ACC AAG TGC AAA GAG GAA GGA  
Thr Ser Asn Thr Lys Cys Lys Glu Glu Gly

TCC AGA TCT AAC GAG CCC AAA TCT TGT GAC  
Ser Arg Ser Asn Glu Pro Lys Ser Cys Asp

→ **hIgG1 hinge**

500

AAA ACT CAC ACA TGC CCA CCG TGC CCA TAG  
Lys Thr His Thr Cys Pro Pro Cys Pro \*\*\*

FIG. 12

TGA ggtaccttctgag

\*\*\*

FIG. 13

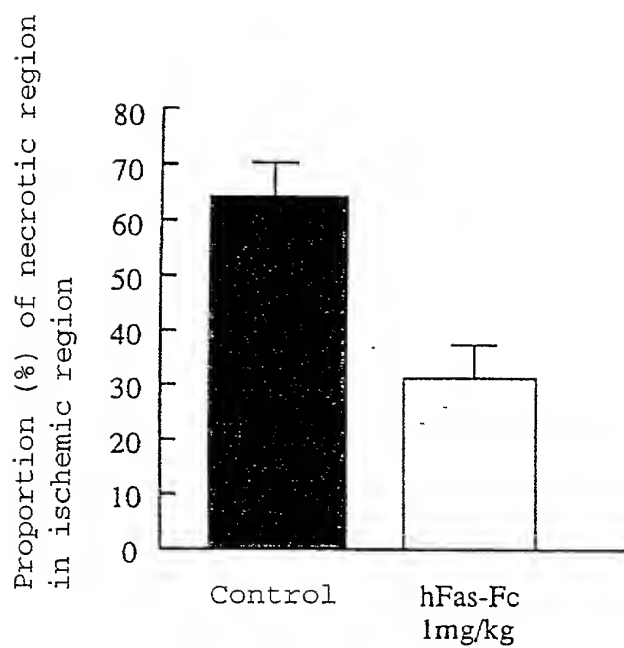
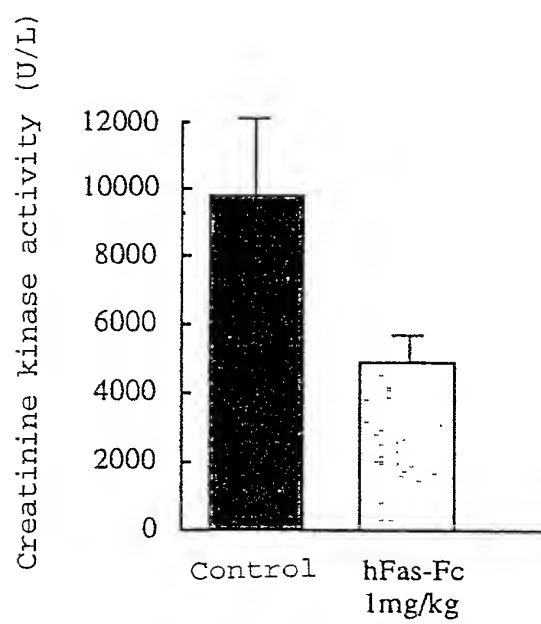
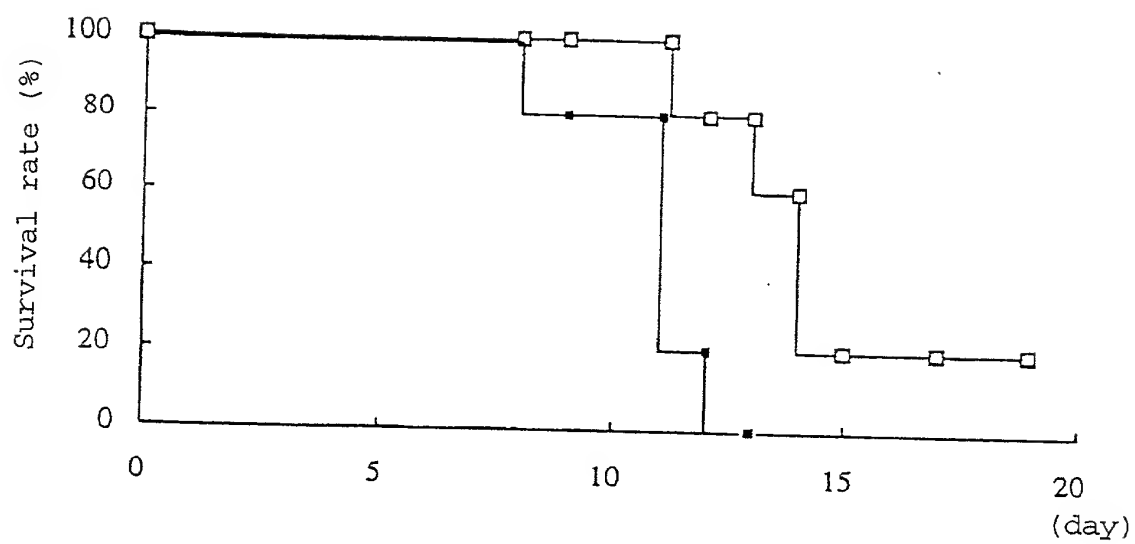


FIG. 14



F I G . 1 5



F I G . 1 6

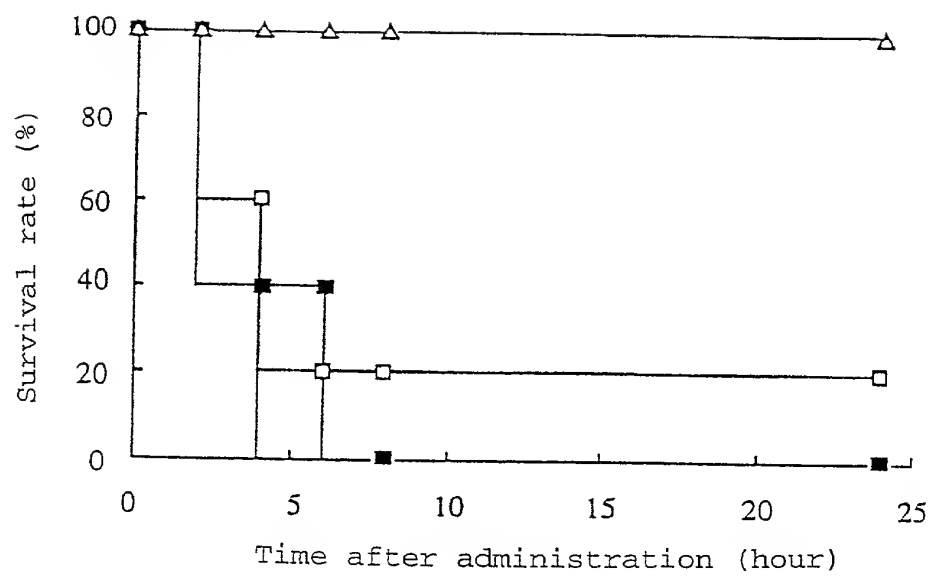




FIG. 17

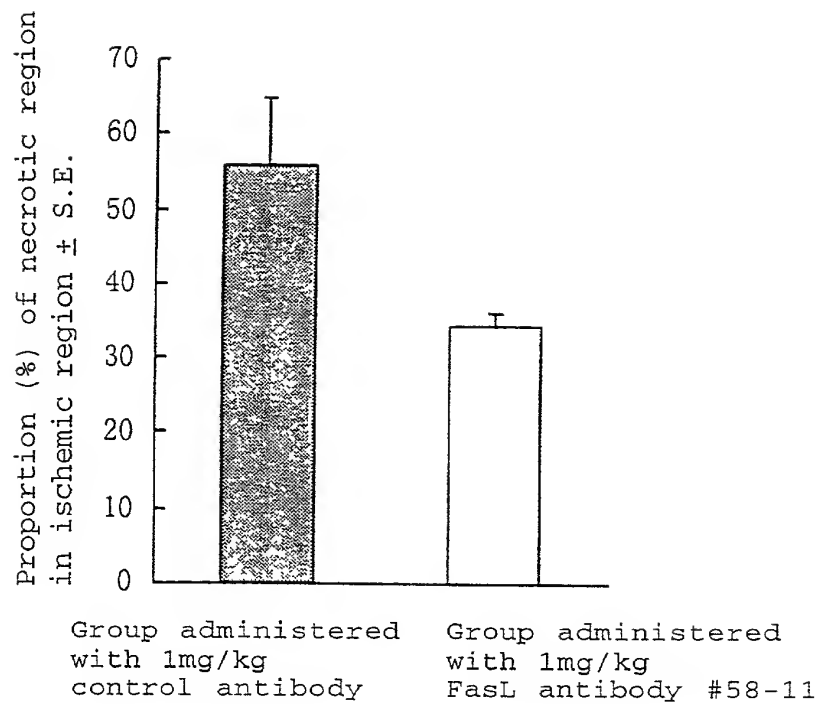


FIG. 18

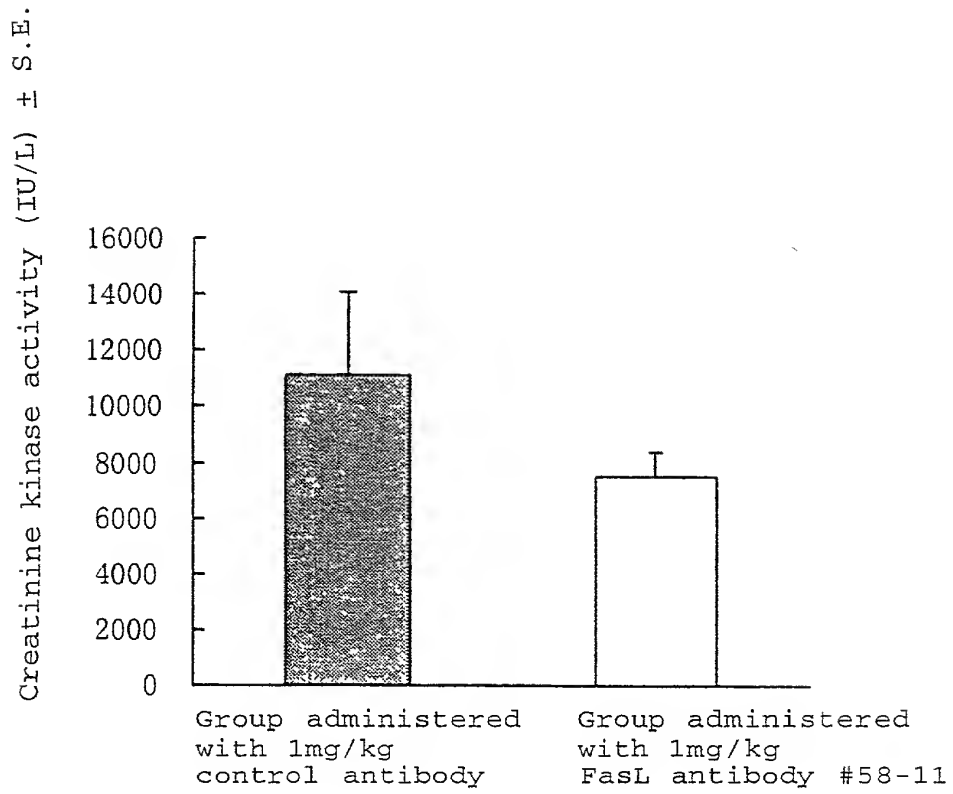


FIG. 19

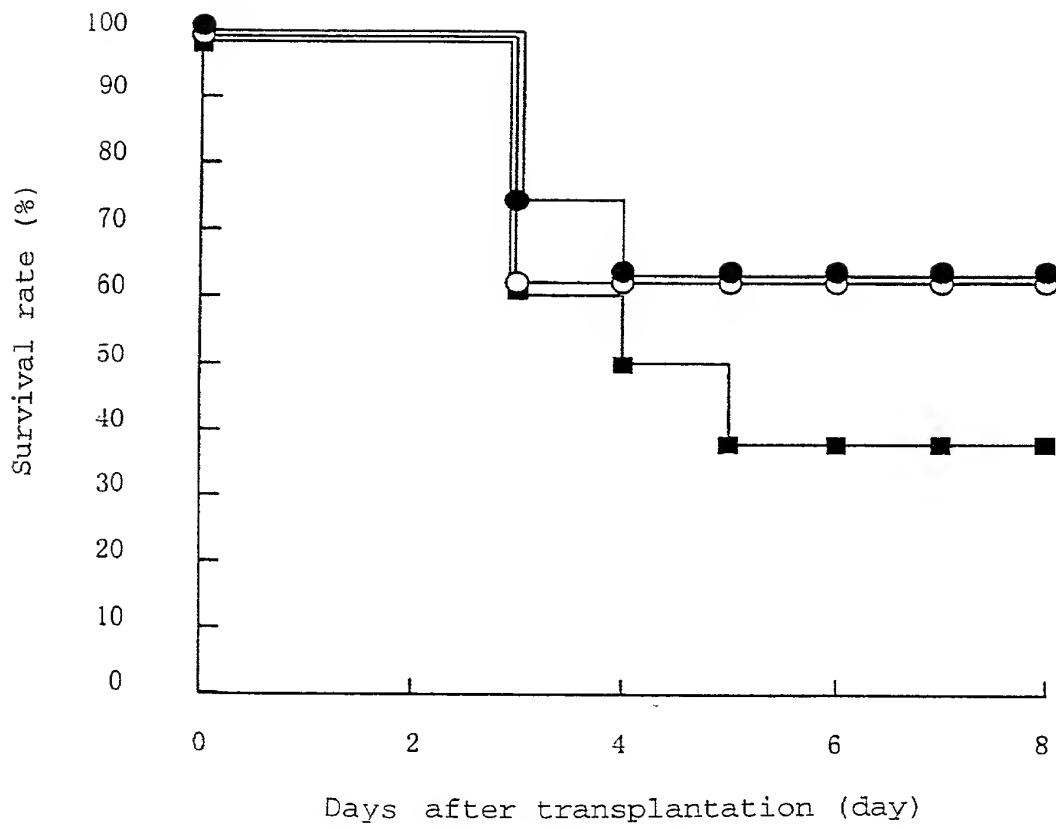


FIG. 20

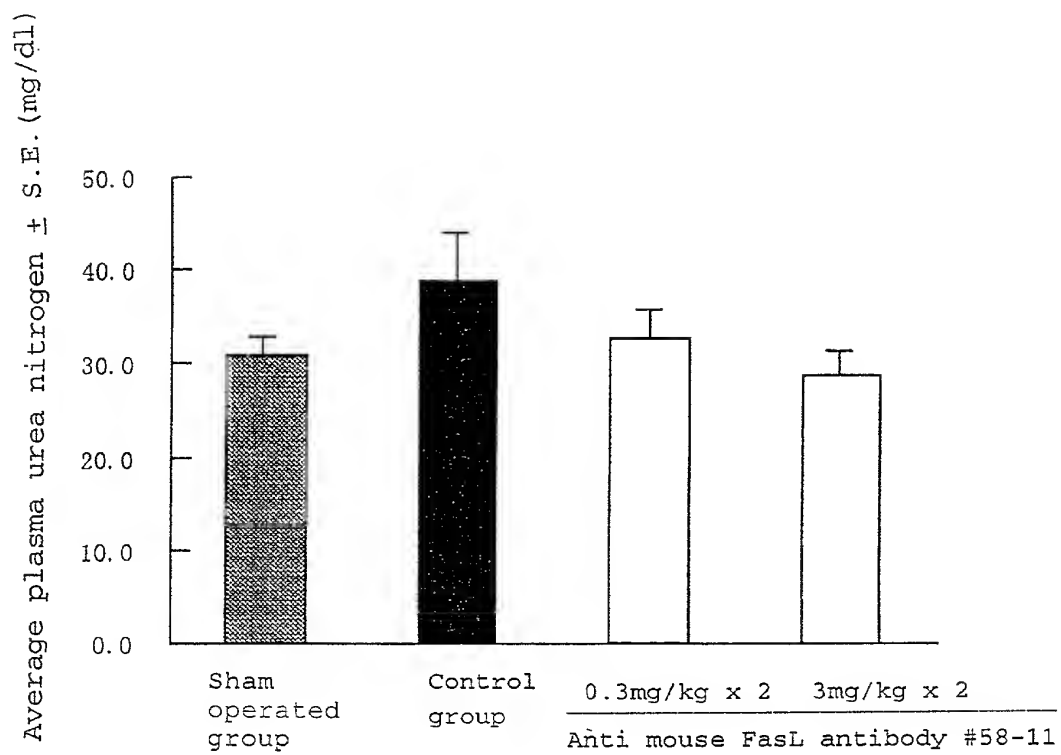


FIG. 21

